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## DAMIANCARRINGTON'S ENVIRONMENTBLOG



# US military combines green and mean to fly drones on biofuels

The US navy's aggressive plan to replace a third of its huge fuel use with biofuels has now seen the unmanned aircraft, as well as ships and supersonic aircraft, trial the fuels



A BQM-74E aerial drone is launched from the USS Thach. The US Navy has flown drones using a 50-50 mix of biofuel and jet fuel. Photograph: MC3 Stuart Phillips/U.S. Navy

The unmanned drones used by the US Navy to bomb its enemies without risking its pilots have been tested using a 50-50 mix of biofuel and regular jet fuel. The use of drones has become increasingly controversial, but that's a debate for another place.

What's important here is that it is another sign that one of the most hard-headed outfits on Earth has realised that being green can help them be mean. Thomas Hicks, the deputy assistant secretary of state of the US Navy, puts it plainly. The navy's plan, to get a third of all its fuel from biofuels by 2020 "increases our mission effectiveness and is better for the US economically." What he means is that using less fuel exposes the Navy's forces to less risk during resupply and that cutting reliance on imported oil increases security and could save money.

We've written about the Navy's plans before, but an update is worthwhile. Hicks, attending the World Biofuels Markets conference in Rotterdam, told me that using biofuel had caused no negative issues for the operation of the drones: "In fact, because the fuel is cleaner, we have seen some positive impacts, as per the engine performance."

As well as the drones, Hicks said the Navy has virtually finished testing all its ships and aircraft on 50-50 biofuel blends. An F/A-18 Super Hornet – the biggest gas-guzzler in the US air fleet – has been tested at almost twice the speed of sound and a ship has been tested at 50 knots on the fuel.

The first operational outing for the Navy's biofuel venture will be in 2012, at the vast [Rim of the Pacific naval exercise](#). Some of the US ships will sail under the 50-50 blends, along with a nuclear-powered aircraft carrier, on which all the planes will fly on the same mix. A similar carrier strike group [will deploy in 2016](#).

The Navy has also tested a hybrid electric propulsion system on the 250m-long [USS Makin Island](#). It saved \$2m in fuel costs on its maiden voyage, from the Mississippi round South America and up to San Diego. Hicks estimates the lifetime saving at \$250m.

The Navy is putting \$500m into the biofuels programme, which he likens to the Navy's steel programme in the 19th century. "Then we needed steel for our vessels, but were getting all of the steel from the UK and Germany," he said. "So the US Navy created the US steel industry."

"Is the biofuel plan an aggressive goal? Yes, but small goals deliver small results," Hicks said, adding that he expected \$500m private investment to match the Navy's funds.

So the US Navy, scarcely muesli-munching treehuggers, has a goal to deliver millions of gallons of biofuel that must be price-competitive and have lower carbon emissions than oil. The [US military](#) views climate change as real and a security threat, but its aim in going green is simply to make its combat forces more effective. So just imagine what could be done if the US as a whole targeted curbing global warming. As the Marines say, "[oorah!](#)"

• **Note:** After publication, the US navy requested changes to some information given to the Guardian by Tom Hicks. He said four ships would sail under the 50-50 blends in 2012 and that a strike group of 11 ships will follow in 2016. The US navy spokesman said the number of ships in both events was still being determined.

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[Next](#)

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